

## MANNER AND PATH: EVIDENCE FROM A MULTILINGUAL CORPUS

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This paper presents the results of a comparative study of English and French translations of Norwegian predications of intransitive motion events containing the PATH prepositions *mellom* [between], *gjennom* [through] and *over* [over/across]. These three prepositions may code PATHs that cross a barrier. The data for the study consists of the translation equivalents in the Oslo Multilingual Corpus of intransitive motion predications containing all three Norwegian prepositions. The English translations are shown to conform by and large to a satellite-framed pattern. As for the French translations, there are differences between all three PATH types with respect to both verbal and adverbial coding. There are quite a few tokens in which MANNER is coded verbally for all three PATH types, perhaps more than one would expect in the case of what is commonly taken to be a predominantly verb-framed language.

### 1. Introduction<sup>1</sup>

This paper presents the results of a comparative study of English and French translations of Norwegian predications of intransitive motion events containing three PATH prepositions, *mellom* [between], *gjennom* [through] and *over* [over/across]<sup>2</sup>. All three prepositions commonly, though not exclusively, code PATHs that cross a boundary. That is, when *x* moves *over* or *through* *z*, it often ends up on the other side of *z*, and when *x* moves *between* *y* and *z*, it normally ends up on the other side of an area separating the two points *y* and *z*. The reason for studying PATH types that potentially code boundary crossing lies in the fact that motion along this form of PATH is said to strongly resist coding by MANNER verbs in what have become known, following Talmy (1985), as verb-framed languages (Aske 1989, Slobin 2006: 67).

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<sup>1</sup> I would like to thank two anonymous reviewers for their exceptionally detailed and constructive comments. This article would have been much the poorer without their suggestions.

<sup>2</sup> This paper draws upon, and builds upon previous papers comparing predications in English and French, in particular Egan (2013) on [betweenness], Egan (2014) on [throughness] and Egan & Rawoens (2013) on [overness].

Since a sizable number, although by no means all, of the examples in the study encode events involving boundary-crossing, I begin by contrasting these with events involving boundary-internal motion. Figure 1 illustrates boundary-internal and boundary-crossing PATHs [through], [over] and [between].

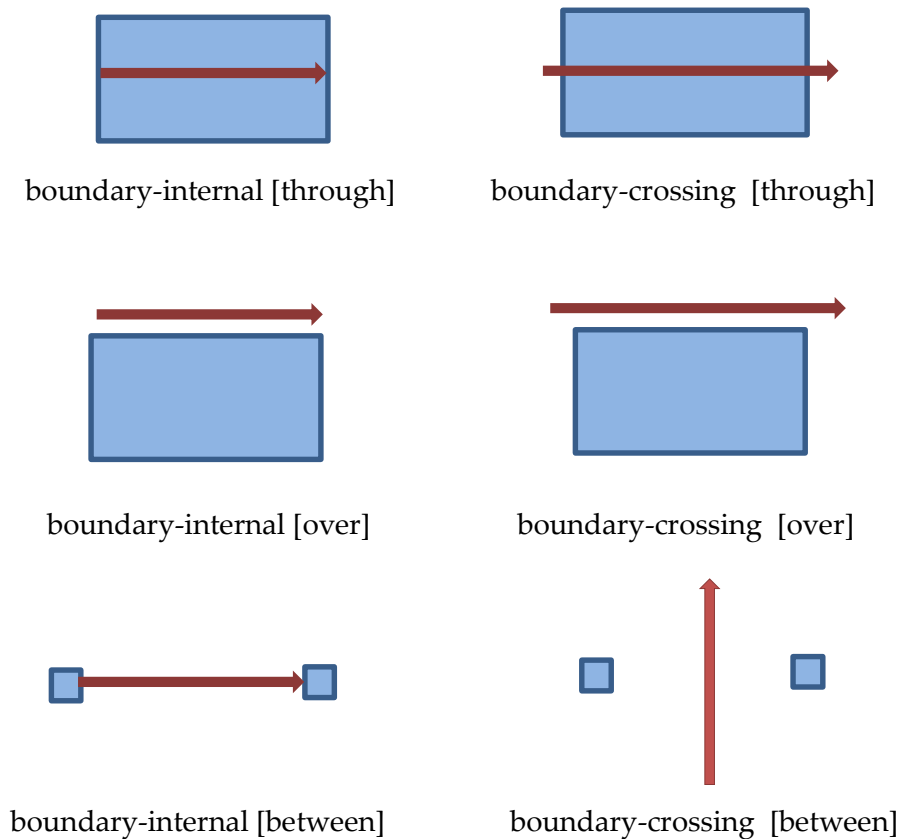


Figure 2: Boundary-internal and boundary-crossing events with three types of PATH

In all three types of boundary-internal event illustrated in Figure 1, the PATH extends from one side of a landmark (in the sense of Langacker 1987, Lindstromberg 2010, corresponding to Talmy's (2000) 'Ground') to the other, without breaching the frontiers of this landmark, as it were. In [throughness] events the boundaries consist of the borders of a two- or three-dimensional landmark. In [overness] events, the boundaries comprise lines, not illustrated in the figure, extending upwards from each end of the physical landmark. In [betweenness] events the boundaries consist of two points, which

enclose an area between them. In the case of boundary-internal events, the mover ends up within the confines of the landmark. In the case of boundary-crossing events the mover ends up outside its boundaries.<sup>3</sup>

Talmy's typology distinguishes between languages such as the Romance languages, including French, which favour coding the PATH of a intransitive motion predication in the verb, as in (1c) and what he called satellite-framed languages, such as Norwegian and English, which tend to code the PATH in an adverbial particle, as in (1a) and (1b), leaving the verb free to code MANNER.

- (1) a. Johan snudde seg beveget og gikk *ut*. (HW2)<sup>4</sup>  
       'Johan turned himself moved and walked out.'  
       b. Touched by the gesture, Johan turned and walked *out*. (HW2TE)  
       c. Johan, ému, se retourna et *sortit*. (HW2TF)

Talmy restricted the term satellite to adverbial particles. As Croft *et al.* (2010: 205) point out however: "Semantically, there is no difference in the encoding of the components of an event between a form that can only be a preposition and a form that can be a particle as well as a preposition". When used as a particle such a form is often called an intransitive preposition (by, for instance, Huddleston & Pullum 2002: 280). The

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<sup>3</sup> Lindstromberg (2010: 90, 112, 127) has somewhat similar illustrations of boundary-crossing uses of the English prepositions *between*, *through* and *over*.

<sup>4</sup> All examples in this article are quoted with the source token, a gloss by the author and its translations into both English and French. Thus, even in cases where it is the English form that is being explicitly discussed, the Norwegian original and French translation are also cited, both for the sake of completeness and to satisfy any curiosity on the part of the reader as to the corresponding tokens in the other languages. The letters and number 'HW2' refer to the source text in the Norwegian – English – French – German sub-part of the Oslo Multilingual Corpus, 'HW' being the initials of the author. 'TE' and 'TF' stand for English and French translated text, respectively. In all examples items coding MANNER are underlined, and items coding PATH are in italics.

distinction is similar to that drawn in the cognitive linguistics literature between prepositions with elaborated and unelaborated landmarks (Langacker 1987: 237). Some scholars working on motion events, such as Beavers *et al.* (2010: 338) have also preferred to group preposition phrases together with other sorts of directional adverbials, such as particles. This practice is followed in the present study, in which the two main syntactic categories are Verb and Adverbial, irrespective of whether the latter takes the form of an adverbial particle, a preposition phrase, an adjunct, or a non-finite clause.

Ever since Talmy first formulated the distinction between verb- and satellite-framed languages, there has been a considerable amount of comparative research into the coding of motion (see, for instance, the papers in Stromqvist & Verhoeven 2004 and Hickmann & Robert 2006). Studies of English have shown that it conforms by and large to the satellite-framed type (Croft *et al.* 2010, Fanego 2012). Studies of French have shown a muddier picture, with work by Kopecka (2006) and Pourcel and Kopecka (2005) giving the impression of a sort of typological hybrid more than a rigid verb-framed type. Hickmann *et al.* (2009: 707) maintain that “although mixed, contemporary French is primarily verb-framed with a reduced secondary satellite-framed subsystem”. One aim of the present study is to explore the extent to which such a subsystem is also valid for boundary-crossing predications, and to see whether it varies according to the different PATH types, [betweenness], [throughness] and [overness].

Given that there has been so much previous research on motion predications in English and French one may legitimately enquire as to the justification for the writing of yet another paper on the topic. What sets the present study apart from previous studies of these two languages is the nature of the data at its core. Previous comparative research into the ways in which languages encode motion events have often been based on data in the form of oral descriptions of events in a picture book (such as the Frog story: see Berman & Slobin 1994) or in short video snippets (see, for instance, Engemann *et al.* 2012, Vulchanova *et al.* 2012). In these studies the participants respond to visual stimuli. In the present study the participants (who, of course, did not know at the time that they were playing this role) are two sets of translators, who are responding to verbal stimuli in the

source language, Norwegian. It is the set of expressions in the source language which serves as grounds for the comparison of their translations into the other two languages (see Egan 2013). Their suitability in providing grounds for comparison will be discussed in section 2, which also contains information on the methodology employed. In section 3 the encoding of MANNER and PATH with the three types of PATH as expressed in the Norwegian source texts are presented and exemplified, while section 4 deals with the coding of MANNER and PATH in translations into both English and French. Section 5 looks at correspondences between the two languages in their coding of the various types of PATH predication. Finally, section 6 contains a summary and conclusion.

I conclude this introduction by pointing to two sorts of questions, both well worth raising in themselves, which fall outside the scope of this article. In the first place this study does not address directly similarities and differences between the coding of intransitive motion predications in Norwegian on the one hand, and English and French on the other. The Norwegian sources of all the translated items are exemplified, but this is for the sake of transparency with respect to the sorts of prompts to which the translators were responding. Original texts and translated texts constitute fundamentally different text types, and are not well suited as sources for items to be compared. In the second place this article does not address questions related to translation theory. No reference is made, for instance, to hypotheses such as the Translation Universals Hypothesis (Baker 1993), The Unique Items Hypothesis (Tirkkonen-Condit 2004) or the Gravitational Pull Hypothesis (Halverson 2003). These hypotheses are best investigated using translations from various source languages into one and the same target language and not, as in the present case, from one source language into various target languages.

## **2. *Tertium comparationis*, corpus and methodology**

All comparative studies presuppose the existence of a viable *tertium comparationis* (see Jaszczolt 2003, Johansson 2007, Krzeszowski 1990) as a guarantor of equivalence between the sets of items being compared. According to Krzeszowski (1990):

All comparisons involve the basic assumption that the objects to be compared share something in common, against which differences can be stated. This common platform of reference is called *tertium comparationis*. Moreover, any two or more objects can be compared with respect to various features and, as a result, the compared objects may turn out to be similar in some respects but different in others. (Krzyszowski 1990: 15)

As mentioned in the Introduction, comparative studies of motion predications have often employed visual stimuli as prompts to elicit corresponding verbal expressions. It is the fact that they are reactions to the same set of visual stimuli that allows us to compare and contrast these expressions. In other words the visual images fulfil the role of *tertium comparationis* in the act of comparison. Another approach, employed by for example Paulussen (1999), Slobin (2005), Verkerk (2014, 2015) and Viberg (1998, 2003, 2013) involves the use of translation corpora. Viberg (2013), for instance, compares predications of motion with vehicle verbs in languages such as German, Swedish, English, French and Finnish; Slobin compares predications of motion events in one chapter of *The Hobbit* with their translations into nine languages, while Verkerk (2014, 2015) compares translations of a selection of motion predications in the English novel *Alice in Wonderland* and the Spanish novel *O alquimista* into as many as 20 different languages. The present study is also based on the evidence of a multilingual corpus. The value of the study obviously stands or falls by the question of the suitability of expressions in the original set of texts to serve as *tertium comparationis* for the expressions in the target texts, so it is worthwhile dwelling for a moment on this point.

According to Johansson (2001: 584), “The advantage of a corpus of original texts and their translations is that the translation is intended to express the same meaning as the original text”. Ebeling & Ebeling (2013: 21), however, contend that “One of the difficulties in starting with meaning is how to delimit it. Starting with form, the boundaries are already set, while meaning is much more elastic.” In the present study the starting point consists of forms, albeit verbal rather than visual ones. Translators of a text are subject to more constraints than observers of a picture, such as those in the

Frog story, insofar as they may not be at liberty to construe the situations or events in the original texts as freely as the latter. They are, however, at liberty to *re*-construe them, should they feel the wish or need to do so. There is also the danger that translators will be unduly influenced by the form of the expression in the source text, that their renditions may be marred by what are termed translation effects (Johansson 1998: 5), or translationese (Gellerstam (996: 54), by which are meant the retention in the target language texts of features of the source language that are not equally felicitous in the target. However, when one is aware of this danger, one can keep an eye out for such effects in one's material. Moreover, in an investigation such as the present one, where translations, rather than an original text and a translation, are being compared to one another, one might expect to find translation effects in both sets of translations.

There are two further arguments that may be advanced in favour of employing translation corpora for contrasting various sorts of predications in two or more languages. The first is that unlike informants in visual experiments, translators are not participating in an experiment. There is therefore no danger of the results being vitiated by the observer's paradox (Labov 1972). The second is the very fact that parallel translations can be used to contrast a wide variety of predications that may be encoded using identical forms. While the use of visual prompts in the elicitation of utterances about motion has led to a great increase in our knowledge of how these predications are coded in various languages, such prompts are only suited for the investigation of concrete relations. For more abstract relations, we must turn to other sorts of data. Such relations are moreover very common. For instance spatial predications, denoting either location or motion, account for just under 50% of the tokens containing the Norwegian preposition *gjennom* (through) in the Oslo Multilingual Corpus (see Egan 2014: 240). If we wish to compare predications of physical motion, such as that encoded in example (2), to extended senses, such as those encoded in examples (3) and (4), we should obviously employ similar types of data. Multilingual translation corpora provide us with a source for these sorts of data.

- (2) a. Og så klatre ut *gjennom* det åpne vinduet. (HW2)

- ‘And then climb out through the open window-the.’<sup>5</sup>
- b. Then crawled *through* the open window. (HW2TE)
  - c. Elle *sortait* ensuite *par* la fenêtre. (HW2TF)
- (3)
- a. Måkene skrek inn til dem *gjennom* åpne vinduer. (HW2)
  - ‘Gulls-the cried in to them through open windows’.
  - b. Sea gulls shrieked to them *through* the open windows. (HW2TE)
  - c. Les mouettes criaient *à travers* les fenêtres ouvertes. (HW2TF)
- (4)
- a. Misunnelige blikk skjøt *gjennom* småskogen [...] (BHH1)
  - ‘Envious looks shot through copse-the.’
  - b. Envious glances darted *through* the underbrush [...] (BHH1TE)
  - c. Et d’envieux regards *perçaient* la forêt de petits arbres [...] (BHH1TF)

Both examples (3) and (4) encode expressions of [throughness] that would be very difficult to elicit using visual prompts. A multilingual corpus such as the Oslo Multilingual Corpus (hereafter OMC) comprises a rich source for these sorts of predication, as well as containing examples of physical motion like (2) to which they can be compared.

The present study is a bottom-up one in that it takes as its starting point all occurrences in the OMC of the three Norwegian prepositions *gjennom* [through], *mellom* [between] and *over* [over], all three of which may be used to encode PATHs which cross boundaries. In its concentration on three specific path types, it differs from studies such as Slobin (2005) and Verkerk (2015) which take as their starting points all types of motion predication in specific texts as translated into a variety of languages by one translator in each case. The reason for starting with PATH types is the wish to analyse a relatively large number of tokens that share similar core semantics and that have been produced by several language users (translators) in each language.

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<sup>5</sup> In a Norwegian nominal the definite article is suffixed to the head noun. If the nominal contains a pre-modifier, definiteness is signalled twice, before the modifier and suffixed to the head.



The Norwegian – English – French – German part of the OMC consists of long aligned extracts from five Norwegian novels, together with their translations into English, French and German (see Johansson 2007 for details of the texts). In the present study, only the English and French translations have been consulted. In the case of three of the five novels in the corpus, the French translation was published first, just one or two years before the English one. The remaining two novels were translated first into English, the French translations appearing within three years of the English ones. There is no text-internal evidence of one translation having influenced another. There is no doubt that if we were, for example, to encounter examples of similar mistranslations of the same passage into both languages, this would give rise to suspicion of consulting another translation on the part of the translator. However, in the course of several years of working with the corpus, I have not come across this type of evidence.

There are in all 322 tokens of *gjennom* [through], 423 tokens of *mellom* [between] and 852 tokens of *over* [over] in the original Norwegian texts in the OMC. All three Norwegian prepositions occur in adverbials and post-modifiers denoting a range of relational predications. All tokens of the three Norwegian prepositions were classified semantically. The range of predication types in the corpus for the three prepositions overlaps to some extent, but is not identical. For instance, all three are used in predications of location, motion and time, two of them, *gjennom* [through] and *over* [over] in predications of perception, while other sorts of predications are evidenced for only one of the prepositions. Thus only *gjennom* [through] is used in predications of means, *mellom* [between] in predications of scale and interaction, and *over* [over] in predications of content and topic (corresponding to English *of* and *on*). I extracted all motion predications manually from the set of downloaded tokens. Then predications of transitive motion (caused motion) were set aside, with intransitive motion predications being singled out for further study. It is the two sets of translations of these tokens that are presented and discussed in section 4. I should point out at the outset that the term ‘intransitive motion predications’ comprises forms of motion in which the mover is coded by the syntactic subject, regardless of whether this mover is agentive (Goldberg

2006: 73). Thus tokens containing a verb denoting involuntary motion, such as *falle* (fall), are included along with tokens of voluntary motion, encoded by verbs such as *hoppe* (jump) or *løpe* (run). Verbs of assuming position, such as *bøye seg* (bend) and *lene* (lean), were excluded, although they undoubtedly can denote motion along a characteristic PATH in a characteristic MANNER (see Egan & Rawoens 2013). However, verbs such as these, which are classed as ‘verbs of spatial configuration’ by Levin (1993: 255), are not usually included in studies of motion verbs. It was therefore decided to exclude them here.<sup>6</sup> The number of tokens encoding intransitive motion with PATH specified in an adverbial amounted to 315 in all, 58 encoding [betweenness], 110 [throughness] and 147 [overness].

Note that it is the coding in the original Norwegian text of a token as incorporating intransitive motion that was criterial for including that token in the investigation. The translators may well have chosen to reconstrue the event as involving caused-motion, for instance, or as not involving motion at all. The question arises as to whether one should omit from the data cases where one or both of the translators has chosen such an option. However, this would constitute an unwarranted distortion of the data base in what is, after all, a bottom-up investigation. Moreover, it is difficult to draw the line on grounds of principle between the translation of a satellite-framed intransitive motion original by a verb-framed construction and a caused-motion construction. Both constructions are divergent in form, one more so than the other. The fact that a syntactically divergent construction is employed, and the form that divergent construction takes, is of interest in itself. If however one of the translators omits completely to translate a token, and there are a small handful of such instances in the

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<sup>6</sup> This decision was made on the advice of two anonymous referees. Another set of verbs which code a characteristic form of motion comprises verbs of touching (Levin 1993: 155). These are included in the discussion of motion verbs with Norwegian *over* in Egan & Rawoens (2013), but excluded from the present study on the advice of the same two anonymous referees.

corpus, the corresponding original token and the other translations are also omitted, as the lack of a token in one of the target languages leaves us no grounds for comparison.

Before presenting in section 3 the original Norwegian tokens that comprise the *tertia comparationis* for the study, some words should be said about how central concepts, such as PATH and MANNER are operationalised in the analysis. By PATH is meant the trajectory taken by something that moves, which may be called a mover. The mover corresponds to Talmy's (2000) 'Figure' and Langacker's (1987) 'trajector'. If the mover is a solid object, the PATH is one-dimensional. If the mover is liquid, the path may be two-dimensional, and if it is gaseous it may be three-dimensional. Apart from a small handful of liquids in predications of [overness], all of the movers in my data are solid objects and the PATHs thus one-dimensional. PATHs may be divided into three main phases, the starting point of the movement, often referred to as the SOURCE, the ROUTE taken by the mover, and the end-point of the movement, which may be referred to as the GOAL, at least in cases of teleological motion. A predication of motion may contain reference to none of these three phases, to one of them, two of them, or all three, as illustrated in Table 1.

PATH phases encoded	Examples
None	<i>He was driving.</i>
Just SOURCE	<i>He drove from London.</i>
Just GOAL	<i>He drove to Oxford.</i>
Just ROUTE	<i>He drove through Reading.</i>
SOURCE plus ROUTE	<i>He drove from London through Reading.</i>
ROUTE plus GOAL	<i>He drove through Reading to Oxford.</i>
SOURCE plus ROUTE plus GOAL	<i>He drove from London through Reading to Oxford.</i>

Table 1: Encoding various phases of PATHs

In Table 1 the various PATH phases are encoded in adverbials in the form of preposition phrases, where it is the preposition that singles out the phase in question. All three may also be encoded by verbs. Thus verbs like *leave* and *disappear* point to the SOURCE, in the sense that in order to understand a predication containing one of these verbs, one must be able to identify the starting point of the movement. Verbs like *cross* and *traverse* point to the ROUTE, or middle portion of the movement, and verbs like *arrive* or *land* point to its end point.

Like PATH, MANNER of motion may also be coded by a verb or an adverbial. By MANNER is meant the form of locomotion in itself, as coded by verbs like *walk* or *drive*, for example, or some modification of this locomotion, as coded by adverbials like *slowly* or *quickly*. A line must be drawn between adverbials that may affect the locomotion and those that may not. Thus in *He ran in hob-nail boots*, the footwear may be taken to influence the way he ran, and the preposition phrase would therefore be analysed as coding MANNER, whereas in *He ran in a blue jumper*, the item of clothing may be deemed incidental to his way of running. Adverbials like the former but not the latter are therefore classed as MANNER adverbials. Finally there are some verbs that code both PATH and MANNER. The verb *climb*, for instance, codes an upwards ROUTE, unless this is overridden by an adverbial denoting otherwise ('climbed down'). At the same time when used with a human subject it denotes a characteristic way of moving, involving the coordinated use of arms and legs.

If we presume that the two sets of translators whose translations are compared in this study did their best to render faithfully in their respective target languages the predications in the source texts, and there is no *a priori* reason to suppose otherwise, the translations may be said to comprise a legitimate data set for the purposes of comparison. Slobin (2006: 70) claims that "in translations [...] manner salience follows patterns of the target, rather than source language". If this assertion is correct, the fact that Norwegian is satellite-framed should not be of any consequence for the results of the comparison, at least as far as coding of MANNER is concerned. This contention of Slobin's has, however, been disputed by Cappelle (2012), who maintains that

translations of motion predications will tend to some extent to borrow the form of the original text, irrespective of typological differences between the two languages involved. This is one example of a more general theoretical point which concerns the possibility that translation effects may skew the results of the comparison. As mentioned above, there is no doubt that translated texts differ in some respects from original texts. Indeed this is one reason for comparing two sets of translations rather than an original text and a translation. Gellerstam (1996: 54) maintains that translated texts may bear traces of “translationese”, a term denoting a “language variety” of a target language which carries “unmistakable fingerprints” of the source language. They may also display other traits that are seen as typical of translated texts, both at the lexical or syntactic level (see Aijmer & Altenberg 1996: 13, Granger 1996: 48–49, Johansson 1998: 5, Teubert 1996: 247). Given the typological difference between the two languages under investigation, one might expect to find more tokens displaying translation effects in French than in English. However, in order to reach any substantial conclusions on this point, one would need to carry out a similar investigation using a corpus containing texts from a verb-framed language other than French and comparing translations of these sorts of predications into English and French to those from a satellite-framed language such as Norwegian. This endeavour, worthwhile though it undoubtedly is, is beyond the scope of the present study.

### 3. The three types of PATH in the Norwegian original texts

Given that the *tertium comparationis* for the study consists of original Norwegian predications, these must be introduced before we proceed to the comparison of the two sets of translations. In the first place it should be stated that not only is Norwegian a satellite-framed language like English but unlike French, it actually contains fewer PATH verbs than English.<sup>7</sup> As a result of the Norman conquest, English contains PATH verbs such as *enter* and *descend*, where Norwegian normally has a combination of a verb and a

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<sup>7</sup> In Verkerk’s contrastive study, Swedish, which is a very close typological relation of Norwegian, is represented by nine PATH verbs compared to 14 for English. (Verkerk 2015: 44–48)

particle.<sup>8</sup> Moreover, as a result of the design of the study, all the original Norwegian tokens contain one of three PATH prepositions, illustrated here by (5), (6) and (7).

- (5) a. Jeg løp gjennom gangene ... (NF1)  
       'I ran through corridors-the ....'  
     b. I would run along the corridors ... (NF1TE)  
     c. Je courais à travers les couloirs ... (NF1TF)
- (6) a. Så seilte de i langsom kino mellom kokospalmene ... (JG3)  
       'Then sailed they in slow motion between coconut-palm-trees-the....'  
     b. Then, as if in slow motion, they sailed between the coconut palms ... (JG3TE)  
     c. Puis, comme au ralenti, ils naviguèrent *entre* les cocotiers ... (JG3TF)
- (7) a. En jente passerte dem, hoppet over trinnet ... (NF1)  
       'A girl passed them, jumped over step-the...'  
     b. One of the girls passed them, jumping over the step ... (NF1TE)  
     c. A ce moment, une fille passa devant eux et sauta par-dessus la marche ... (NF1TF)

All of the Norwegian originals contain a preposition phrase encoding a PATH. The verb in each may code MANNER, as in (5) – (7), PATH, as in (8) or it may be a neutral motion verb, as in (9).

- (8) a. En stadig strøm av elever til fots og på sykkel [...] *forsvant mellom* bygningene.  
       (KF1)  
       'A steady stream of pupils on foot and on bikes [...] disappeared between buildings-the.'  
     b. A steady stream of pupils, moving on foot and by bike [...] *disappeared between* the buildings. (KF1TE)  
     c. A pied ou en vélo, un flot ininterrompu d'élèves [...] et *disparaissait entre* les bâtiments. (KF1TF)

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<sup>8</sup> In fact Norwegian does have a verb cognate to English *enter*. However it was originally borrowed from Dutch and means 'to board (a ship)'. The sense corresponding to the English and French 'go in' was also borrowed in the twentieth century. It is not very common, but may be seen in example (47).

- (9) a. Jeg kommer meg ut på taket *gjennom* et halvåpent vindu. (NF1)  
       'I come myself out onto roof-the through a half-open window.'  
     b. I clambered out on to the roof *through* a half-open window. (NF1TE)  
     c. Je gagne le toit *par* une fenêtre entrouverte. (NF1TF)

The verb *komme* (come), which is a neutral verb of motion in (9a) is labelled a PATH verb when used deictically to code motion towards the speaker, as in (10a).

- (10) a. Kirketjeneren til sist *kom over* og spurte hvor jeg ble av. (BHH1)  
       'Verger-the at last came over and asked where I had got to.'  
     b. At last the verger *came over* and asked what had happened. (BHH1TE)  
     c. Le bedeau *est venu* voir ce qui passait. (BHH1TF)

Both translations in (10) resemble the Norwegian original insofar as the mover is encoded as approaching the speaker. In this sort of deictic usage we can identify the direction of movement from the verb and the co-text. There is no PATH adverbial in the French version, while neither in Norwegian nor in English is the adverbial *over* necessary in order to identify the PATH. In (9a), on the other hand, the verb (*kom*) does not denote the PATH taken by the Figure. It could be replaced by a prototypical neutral motion verb like *bevege seg* (move) without any loss of semantic content.

Since the data for this study consist of translation correspondences of motion predications containing the three Norwegian prepositions *gjennom* (through), *mellom* (between), and *over* (over), I will briefly present the sorts of PATHs which are coded by these three prepositions. *Mellom*, the Norwegian [betweenness] preposition, is defined as follows in *Norsk Ordbok*, the Norwegian equivalent of the OED.

**Mellom** or **imellom** prep [...] **b** about a route or a larger area which is delimited (by the landmark) on two or more sides (preferably with a subject which is moving). (*Norsk Ordbok* 2008, my translation)<sup>9</sup>

This is the second definition in the dictionary, the first being devoted to the static locative sense. The examples cited in the dictionary are all of motion from *a* to *b*, and possibly back again. Of 58 tokens of intransitive motion [between] in the OMC, however, a full 47 (81%) denote acts of motion orthogonal to the *a-b* axis, and therefore boundary-crossing, as in (11).

- (11) a. Her sprang han inn *mellom* noen havneskur ... (JG3)  
           ‘Here ran he in between some dock-sheds...’  
       b. He ran *between* some dockside sheds... (JG3TE)  
       c. Il se faufila *entre* les hangars. (JG3TF)

A further ten tokens encode motion between *a* and *b* and back again, as in (12).

- (12) a. Gikk inn og ut som en vakthund *mellom* stuene og kontoret. (HW2)  
           ‘Went in and out like a watchdog between living-rooms-the and office-the.’  
       b. Moved *between the main house and the office* like a watchdog. (HW2TE)  
       c. Il allait et venait *entre* la maison et le bureau comme un chien de garde. (HW2TF)

There is, in fact, just one token in my data of motion along a route from *a* to *b*, stopping at *b*, which one might have taken from the dictionary definition to be the prototypical sense.

The main definition of *gjennom*, the Norwegian [throughness] preposition, in *Norsk Ordbok*, is:

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<sup>9</sup> The original definition reads: “**mellom** el **imellom** prep [...] **b** om ei strekning el eit større område som er avgrensa (av styringa) på to el flere sider ( gjerne med subj som er i rørsle”. (*Norsk Ordbok* 2008)



**Gjennom** or **igjennom** prep, adv **1 a**) [U]sed about a movement or something perceived as motion which takes place in (within, surrounded by) that which is encoded by the landmark from one end or side all the way to the other, containing the whole landmark from start to finish; (in) from the one side or end and (out) to the other. (*Norsk Ordbok* 2002, my translation)<sup>10</sup>

According to this definition *gjennom* can be used to encode [throughness] actions which may or may not involve traversal of the barriers of the landmark of the preposition, which takes the form of a container. There are 50 tokens in which either actions of entrance or exiting are implied in the co-text, as in (13), as opposed to 60 tokens, such as (14), where this is not the case.

- (13) a. De gikk inn i den tomme kirken, *gjennom* sakristiet. (HW2)  
       'They walked into the empty church, through sacristy-the.'  
       b. They walked into the empty church, *through the sacristy*. (HW2TE)  
       c. Ils *entrèrent* dans l'église vide *par la sacristie*. (HWTF)
- (14) a. Han går *gjennom* de nymalte rommene mine. (HW2)  
       'He walks through the newly painted rooms mine.'  
       b. He walks *through my freshly painted rooms*. (HW2TE)  
       c. Il *traverse* mes pièces nouvellement peintes. (HW2TF)

The third Norwegian preposition *over*, which is cognate with English *over*, is defined as follows in *Norsk Ordbok*.

**Over** prep **1**. Used in expressions which specify that something is moving along or following a trajectory which goes higher up than something else (expressed by the

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<sup>10</sup> The original definition reads: "Gjennom el igjennom prep, adv **1 a**) brukt om rørsle el noko oppfatta som rørsle for å uttrykkja at ho går føre seg i (innanfor, omslutta av) det som styringa nemner frå den eine enden, den eine sida heilt ut til (på) den andre, at ho omfattar det som er uttrykt i styringa frå byrjing til slutt; (inn) frå den eine og (ut) til den andre sida el enden av". (*Norsk Ordbok* 2002)

landmark of the preposition), so that **a** (to a place) at the other side of something that is taller than the other objects around it, or that (in another sense) appears as a (explicit or implicit) boundary or hindrance. [...] **b** beside, along or across a flat surface (or something else which can be said to be flat). (*Norsk Ordbok* 2009, my translation)<sup>11</sup>

The first of these definitions, illustrated in Figure 1, refers to traversal on a superior plane. One can say that it combines the properties of [acrossness] and [aboveness]. In the second definition the property of [aboveness] is missing. The first definition implies the crossing of a boundary, as in (15). The second, exemplified in (16) and (17), does not, although it does not exclude the possibility.

- (15) a. Han kastet seg *over* muren...(NF1)  
           ‘He threw himself over wall-the...’  
       b. He threw himself *over the wall*... (NF1TE)  
       c. Il sauta *par-dessus la muraille*... (NF1TF)
- (16) a. Så snudde hun seg igjen, gikk møysommelig *over* golvet og grep Leos hånd.  
           (HW2)  
           ‘Then turned she herself back, walked carefully across floor-the and took Leo’s hand.’  
       b. Then she turned, walked laboriously *across the room*, and grasped Leo’s hand.  
           (HW2TE)  
       c. Puis elle se retourna, *traversa* péniblement la pièce et prit la main de Léo.  
           (HW2TF)
- (17) a. Han gikk *over* golvet og ut døren. (HW2)  
           ‘He walked across floor-the and out door-the.’  
       b. He walked *across the room* and out the door. (HW2TE)

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<sup>11</sup> The original definition reads: “**Over** prep 1. Brukt i uttr som spesifiserer at noko rører seg langs el fylgjer ei bane som går høgare oppe enn noko anna (uttrykt ved styringa til preposisjonen), såleis **a** (til ein stad) på andre sida av noko som stikk høgare opp enn noko anna rundt seg, el som (på annan måte) verkar som ei (uttrykt el tenkt) grense el hindring. [...] **b** bortetter, langsetter el på tvers av ei (over)flate (eller noko anna som er etter måten flatt) ” (*Norsk Ordbok* 2009)

- c. Il *traversa* la pièce et prit la porte. (HW2Tf)

In (16) the PATH taken by the Figure is entirely contained within the landmark. Not only is there no implication that the Figure exited the room, rather it is explicitly stated that the PATH ended at *Leo* whose hand she grasped. In (17) on the other hand the second con-jointed clause leaves us in no doubt that the Figure did indeed end up outside the landmark, which again takes the form of a room. Of 147 tokens of intransitive motion where the PATH is coded by Norwegian *over*, there are 110 tokens of the type where the Figure maintains contact with the Ground, i.e. of predications which lack the feature [aboveness]. Of these 77 resemble (16) insofar as there is no implication of boundary-crossing, and 33 tokens resemble (17), with the co-text showing that a boundary of the landmark is indeed crossed. There are 37 tokens in which the Figure is at some remove from the Ground on the vertical plane. While the first definition in *Norsk Ordbok* appears to imply that the Figure always crosses a boundary, this is not borne out by the evidence of the examples in the OMC. In fact only 28 tokens resemble (15) in this respect. Finally there are five tokens like (18), in which the landmark codes the location in which an action took place, labelled a SITE, rather than a PATH. Since the starting point for the study comprises PATH predications containing the three prepositions, these five tokens were omitted from the analysis.

- (18) a. *Tok en liten sving over folkene på fjøstunet...* (HW2)  
       ‘Made a little arch over people-the in barnyard-the...’  
       b. It *made a slight curve* above the people in the barnyard... (HW2TE)  
       c. Faisant une pirouette au-dessus de la cour... (HW2TF)

If we conflate the numbers for the two sub-types of PATH coded by Norwegian *over*, we find that 61 of 147 tokens (41%) code boundary-crossing activities. This is less than the proportion of tokens of Norwegian *mellom* (between: 74%) but similar to that of *gjennom* (through: 45%). This difference should be borne in mind when we come to compare the translations of the three different sorts of PATH. Table 2 contains details of the coding of MANNER and PATH in predications containing the three Norwegian prepositions.

Type of PATH		Just Verb	Just Adv.	Verb + Adv.
mellom	MANNER	39	2	1
[between]	PATH	0	53	5
gjennom	MANNER	75	10	3
[through]	PATH	0	105	5
	MANNER + PATH	1	0	0
over	MANNER	82	5	15
[over]	PATH	0	121	22
	MANNER + PATH	4	0	0

Table 2: Encoding MANNER and PATH in the original Norwegian texts

Section 3 contains two tables similar to Table 2, with the details for the encoding of MANNER and PATH in the two sets of translations, which may be compared to Table 2. Given our knowledge of the typological differences between English and French, we may anticipate that the English translations will resemble the source texts more than the French ones. Sections 4 and 5 do not, however, contain explicit comparisons between the translations and the sources. However, I do return to this question in the final section where Figure 4 contains details of all three sets of encodings.

#### 4. Encoding MANNER and PATH in the translated texts

Having classified semantically all tokens of the three Norwegian prepositions and extracted manually those coding intransitive motion tokens, I set aside the Norwegian originals and proceeded to analyse the English and French renderings of the various tokens, before drawing comparisons between them. These comparisons will be

the subject of section 5. Like the original Norwegian tokens presented in section 3, the English and French tokens were all classified according to whether they coded PATH and/or MANNER in the verb or in an adverbial, or both.<sup>12</sup> The results of this classification are presented in Tables 3 and 4 and may be compared to the results for the original tokens in Table 2. One difference between the tables is that the translation tables contain rows for the coding of SITE. As mentioned in section 3, tokens in which Norwegian preposition phrases encoded SITE rather than PATH were excluded from the investigation. However, many of the translations, especially in French, code the SITE, the location in which an act of motion takes place, rather than the PATH followed by the mover. Numbers for these SITE translations are therefore included in Tables 2 and 3.

Before proceeding to an examination in turn of the two sets of translations I will present some aspects that are common to both, albeit to different degrees. In the translations PATH may be encoded in an adverbial, as in (19b), which retains the encoding of (19a), or in the verb, as in (19c).

- (19) a. Kvinnen skrittet *over gjerdet*... (NF1)  
           ‘Woman-the stepped over fence-the...’  
       b. She climbed *over the fence*... (NF1TE)  
       c. Elle *franchit* la haie. (NF1TF)

In (20b) MANNER is coded in the verb, as it is in the original (20a). In (20c), on the other hand, it is coded in an adverbial.

- (20) a. Som uredd hadde ridd *over fjellet*... (HW2)  
           ‘Who fearlessly had ridden over mountain-the ...’  
       b. An unkempt figure who had ridden *across the mountain* ... (HW2TE)  
       c. Qui *avait traversé* courageusement la montagne à cheval... (HW2TF)

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<sup>12</sup> The classification of the data for [betweenness] and [throughness] was carried out by the author alone, the classification of the [overness] tokens in collaboration with Gudrun Rawoens.

There are also a number of verbs that code both MANNER and PATH, such as *collapse* and *s'écrouler* in (21b) and (21c). Both translations in (21) resemble the source token in also containing both a MANNER and a PATH adverbial.

- (21) a. Så ség han vakkert sammen over stolen før han klasket i gulvet. (HW2)  
 'Then slumped he elegantly together over chair-the before he banged onto floor-the.'  
 b. Then he collapsed nicely on the chair before plopping to the floor. (HW2TE)  
 c. Puis il s'écroula avec élégance sur sa chaise avant de tomber sur le sol. (HW2TF)

Double coding of MANNER, as in (21) is uncommon both in the source texts and in both sets of translations. The same cannot be said for double-coding of PATH. Recall that the tokens in the source texts all coded PATH in an adverbial, the majority in the form of a preposition phrase, the remainder in the form of an adverbial particle. A minority also coded PATH in the verb. Double coding of PATH is, however, more common in both sets of translations than in the source texts. (22) may be taken as a typical example of the sort of predication wherein a neutral verb in the source text is rendered by a PATH verb encoding the GOAL in both translations, with the ROUTE encoded by an adverbial in both the original and the translations. A comparison of Tables 3 and 4 reveals that this form of double coding is more common in the French translations than the English ones.

- (22) a. Jacob kom plutselig inn gjennom den lukkede døren. (HW2)  
 'Jacob came suddenly in through the closed door-the.'  
 b. Suddenly Jacob *entered through the closed door*. (HW2TE)  
 c. Jacob *entra tout à coup à travers la porte fermée*. (HW2TF)

The Ground/landmark is encoded as either the complement of a preposition, which may either code PATH, as in (23b) or SITE, as in (23c), or as the direct object of a PATH verb, as in (24b & c).

- (23) a. Dina red over fjellet... (HW2)  
 'Dina rode over mountain-the ...'  
 b. Dina rode across the mountain... (HW2TE)

- c. Dina chevauchait dans la montagne. (HW2TF)
- (24) a. Dina gikk *over golvet*... (HW2)  
       'Dina walked across floor-the ...'
- b. Dina *crossed* the room ... (HW2TE)
- c. Dina *traversa* la pièce ... (HW2TF)

As the coding of Ground follows for the most part from the coding of PATH/SITE, it will not be included in Tables 3 and 4, which summarise the coding preferences of both sets of translators when it comes to the three types of PATH. Finally, all verbs that coded neither PATH nor MANNER (neutral motion verbs such as *travel* or *voyager*) were labelled 'neutral' in my classification. Since these denote neither MANNER nor PATH, nor indeed SITE, they are not included in the tables and figures in this paper.

Table 3 contains the details of the English translations of the three PATH prepositions.

Type of PATH		Just Verb	Just Adv.	Verb + Adv.
mellom	MANNER	37	0	6
[between]	PATH	2	40	5
	MANNER + PATH	0	7	0
	SITE		5	
gjennom	MANNER	66	0	8
[through]	PATH	5	76	6
	MANNER + PATH	4	15	0
	SITE		3	

over	MANNER	72	1	14
[over]	PATH	23	92	15
	MANNER + PATH	14	0	1
	SITE		7	

Table 3: Encoding MANNER, PATH and SITE in English translations of *mellom*, *gjennom* and *over*

The data in Table 3 are reproduced graphically in the form of percentages in Figure 2 for ease of comparison. Note that the percentages are given in terms of the number of verbs and/or adverbials that code MANNER, PATH and SITE. Neutral verbs are not included in the total. Nor are tokens that do not contain any adverbials included in the adverbials column. The reason for their exclusion is that the purpose of the figure is to give comparable information about codings in cases where one or more of the features in question are explicitly encoded.

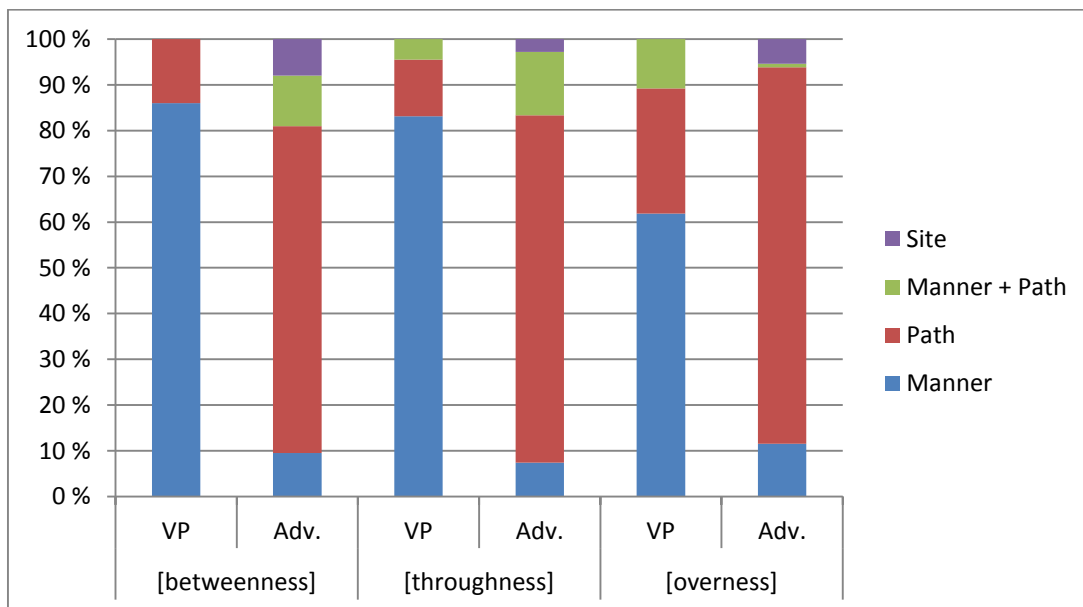


Figure 2: Percentage totals for coding in English Verb and Adverbial for all three types of PATH

It is obvious from even a brief glance at Figure 2 that the English translations conform by and large to a satellite-framed pattern, with the codings of [betweenness] displaying



the fewest variations on the MANNER verb + PATH adverbial pattern. Thus there are only two tokens, one of which is cited as (25b), in which PATH is coded by the verb alone.

- (25) a. Ingen la merke til dem før de fløy nedover veien til fjæra og ble *borte mellom sjøhusene og haugene*. (HW2)  
 ‘No one noticed them before they flew down road-the to shore-the and were gone between sea huts-the and hills-the.’
- b. No one noticed them until they flew down the road toward the beach and *disappeared*. (HW2TE)
- c. Personne ne les remarqua avant qu’ils ne dévalent le chemin vers la mer et qu’ils ne *disparaissent derrière les hangars et les collines*. (HW2TF)

As mentioned above ‘disappear’ is classed as a PATH verb since it denotes the SOURCE of a moving action, but whereas the French translator in (25c) employs a double-coding of PATH, indicating both the SOURCE and end-point of the motion, her English counterpart just mentions the source.

English conforms to the satellite-framed norm not only in having a large number of verb tokens (203) coding just MANNER, but also a large number of verb types. There are 73 verb types in all, yielding a type-token ratio of 2.8. 41 of these verbs occur just once and a further 13 just twice, with only *run* and *walk* being represented by more than 10 tokens, with 20 and 29 respectively. As for verbs that code just PATH, 56 tokens are divided between 15 types, yielding a type-token ratio of 3.7. There are only four verbs that are represented by more than two tokens, deictic *come* with four, *enter* with four, *disappear* with seven, and *cross* with 23.

Predications of [throughness] in English closely resemble those of [betweenness], the only difference worth mentioning being the greater number of tokens in the case of the former coding both MANNER and PATH, either combined in the verb, as in (26b) or in two adverbials, as in (27b).

- (26) a. De gikk gjennom hele kirken... (HW2)  
 ‘They walked through whole church-the...’

- b. They walked the entire length of the church ... (HW2TE)
  - c. Ils *traversèrent* toute l'église ... (HW2TF)
- (27)
- a. Vi begynte å gå langsomt gjennom galleriene... (JG3)  
'We began to walk slowly through galleries-the...'
  - b. We began to walk slowly through the galleries ... (JG3TE)
  - c. Nous déambulâmes un moment à travers les salles ... (JG3TF)

*Walk* in the construction in (26b), but not (27b), is categorised as a MANNER + PATH verb since it has the semantic feature 'traverse in a straight line' in addition to its specification of mode of locomotion.<sup>13</sup>

Predications of [overness] in English resemble those of [betweenness] and [throughness] closely with respect to adverbial coding, but differ from them with respect to the verb, exhibiting more tokens, such as (28b), in which the verb codes PATH as well as tokens coding both MANNER and PATH, as in (29b).

- (28)
- a. De gikk over gården og bort til hovedtrappen. ... (HW2)  
'They walked across yard-the and over to main-stairwell-the...'
  - b. They *crossed* the courtyard to the main entrance. (HW2TE)
  - c. Ils *traversèrent* la cour, allant vers le perron d'entrée. (HW2TF)
- (29)
- a. Jeg [...] hoppet over grøfter... (BHH1)  
'I [...] jumped over ditches...'
  - b. I [...] jumped ditches ... (BHH1TE)
  - c. J'ai [...] bondi par-dessus des fosses ... (BHH1TF)

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<sup>13</sup> An anonymous reviewer disputes this interpretation, writing that it is "unclear how the addition of "in a straight line" adds Path. Moreover, this addition is located in the adjunct, not the verb, so it is unclear to me why the verb would be coded as denoting this component." I take the point about the locomotion not necessarily being straight, but would still argue that the verb *walk*, when it occurs in a construction with a direct object, instantiates meaning 16. *a.* in the OED, "To go over or traverse on foot": in other words that it denotes traversal.

Of the 23 tokens of [overness] in which PATH, and only PATH, is coded by the verb alone, fully 21 contain a form of the verb *cross*, as in (28). Just six of these translate a PATH verb in the source text, there being one token of *krysse* (cross) and five of *skrå* (traverse diagonally). Twelve of the PATH tokens in English correspond to MANNER verbs in the source texts, as is the case with example (28). The remaining handful correspond to neutral verbs such as non-deictic *komme* (come).

The raw figures for the French translations are given in Table 4, with percentages in Figure 3. We may note differences between all three PATH types in French with respect to both verbal and adverbial coding. To begin with the verb, 60% of the verbs in the [betweenness] sample in Figure 3 code MANNER alone<sup>14</sup>, as opposed to less than 40% in the case of the other two PATH types. If we include the MANNER + PATH verbs, the number of verbs coding MANNER varies from 60% in the case of [betweenness] to 39% for [throughness] and 44% for [overness]. Whether or not one chooses to conflate the numbers for MANNER and MANNER + PATH in this way, the number of verbs coding MANNER for all three PATH types must be said to be striking for what is commonly taken to be a predominantly VERB-FRAMED language, at least as far as boundary-crossing predications are concerned. It may therefore be worthwhile to look more closely at the types of verbs involved.

Type of PATH		Just Verb	Just Adv.	Verb + Adv.
<i>Mellom</i>	MANNER	32	0	1
[between]	PATH	3	24	19
	MANNER + PATH	0	6	0
	SITE		12	
<i>Gjennom</i>	MANNER	26	7	6

<sup>14</sup> If one were to include neutral motion verbs in the total, the percentage would be 51%.

[through]	PATH	38	21	18
	MANNER + PATH	1	6	0
	SITE		21	
<i>Over</i>	MANNER	44	15	1
[over]	PATH	66	35	9
	MANNER + PATH	14	3	1
	SITE		37	

Table 4: Encoding MANNER, PATH and SITE in French translations of *mellom*, *gjennom* and *over*

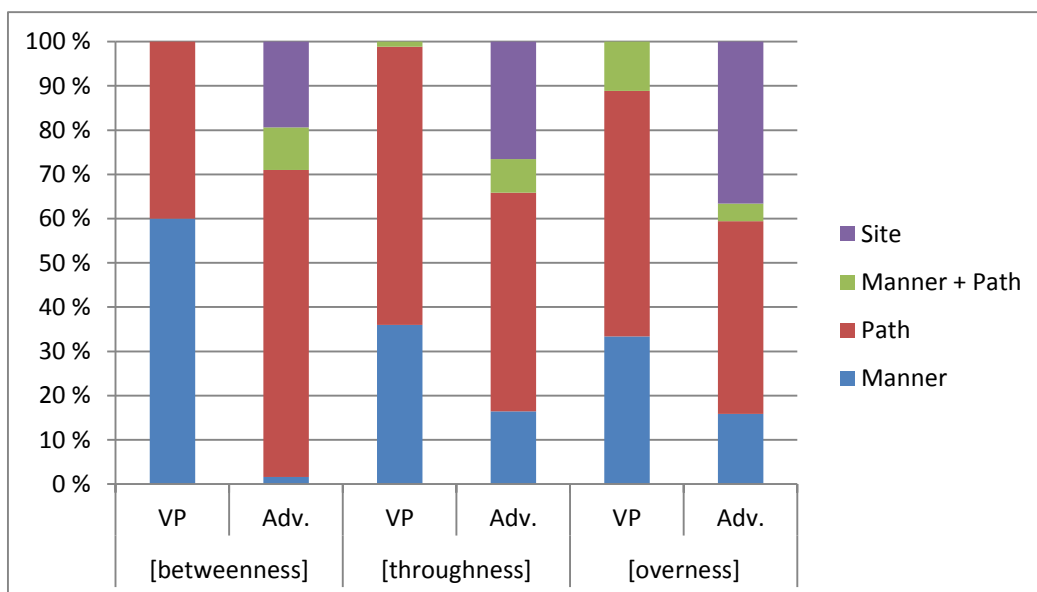


Figure 3: Percentage totals for coding in French Verb and Adverbial for all three types of PATH

The 153 tokens of verbs encoding just PATH in Table 4 instantiate 33 types, yielding a type-token ratio of 4.6. One single verb, *traverser*, accounts for 39% of these tokens, with *franchir* and *passer* the only other two verbs represented by more than 10. The 102 tokens of verbs coding just MANNER in Table 4 instantiate 48 types, 11 of which are reflexive. The type-token ratio is 4.3 and exactly half of the types are represented

by just one token. Among these are vehicle verbs such as *flotter* (float), *conduire* (drive), *cahoter* (bounce) and *bringuebaler* (shake). Verbs that occur with all three types of PATH include *courir* (run: 15 tokens in all), *déambuler* (stroll: 6 tokens), *se jeter* (throw oneself: 5 tokens) and *se précipiter* (rush: 5 tokens). (30c), (31c) and (32c) illustrate in turn the use of *courir* with PATHS [between], [through] and [over].

- (30) a. Eller fór mellom gården og jordene. (HW2)  
       ‘Or rushed between the farm and fields-the.’  
       b. Or ran *between the fields and the courtyard.* (HW2TE)  
       c. Ou qu’il courait *entre la ferme et les champs.* (HW2TF)
- (31) a. Så fløy hun fresende gjennom rommene... (HW2)  
       ‘Then flew she snarling between rooms-the ....’  
       b. Then she hurried *through the rooms*, snarling and sputtering... (HW2TE)  
       c. Alors elle courut avec fureur *de pièce en pièce*... (HW2TF)
- (32) a. Sprang over Dinas hender når de løp *over tangentene.* (HW2)  
       ‘Jumped over Dina’s hands as they ran across keys-the.’  
       b. Leaped over Dina’s hands as they moved *across the keys.* (HW2TE)  
       c. Sautait sur les mains de Dina quand elles couraient *sur les touches.* (HW2TF)

(30) does not predicate the crossing of a boundary since it codes a generic activity. In (31), on the other hand, it is clear that the Figure crosses the thresholds between the various rooms. (32) is not quite as clear-cut. When Dina’s hands moved across the piano keys, is it natural to construe the result with their ending up at the other side of the keys, as it were, or is it more natural to construe the predication as involving oscillation, motion forward and back again, as in (30)? We cannot have recourse to the adverbial to adjudicate between the two readings, since *sur* can mean both [on] and [onto] (see Vandeloise 2008). If the oscillation reading is the correct one then no boundary-crossing is implied.

Of MANNER verbs that occur with two, but not three of the PATH types, one stands out as more common than the remainder. This is the multi-word verb *se frayer un chemin*

(8 tokens) which only occurs with PATHs [between] and [through], as in (33) and (34), respectively.

- (33) a. Idet jeg trådte *ut mellom* trærne... (JG3)  
       ‘As I stepped out between trees-the...’  
       b. Just as I came *out from amongst the trees...* (JG3TE)  
       c. Alors que je me frayais un chemin *parmi les arbres...* (JG3TF)
- (34) a. Han [...] banet seg vei *gjennom grenene fra løvtrærne...* (NF1)  
       ‘He [...] made himself way thought branches-the of deciduous-trees-the...’  
       b. He [...] fought his way *through the foliage...* (NF1TE)  
       c. Il [...] se fraya un chemin *dans les branchages des arbres ...* (NF1TF)

While (34) is most naturally interpreted as imperfective, insofar as we are not given to understand whether the Figure emerged from the trees, (33) would seem to code an action that is perfective, with the Figure definitely ending up outside of the grove of trees. The following co-text makes this clear in both languages. So we can conclude that (33), at least, encodes an action as boundary-crossing.

If we turn our attention to the French adverbials, we may first of all note that there is a greater percentage of PATH-denoting phrases in [betweenness] predications than in the other two types. This is no doubt related to there being a smaller percentage of PATH-denoting verbs in these tokens. Table 5 contains details of the number of tokens of the prepositions *entre* and *à travers* and their cognate verbs in translations of all three PATH types.

	<i>entre</i>	<i>entrer</i>	<i>à travers</i>	<i>traverser</i>
<b>[betweenness]</b>	40	1	5	0
<b>[throughness]</b>	1	4	26	29
<b>[overness]</b>	0	0	6	35
<b>Total</b>	41	5	37	64

Table 5: *entre, entrer, à travers and traverser with all three PATH types*

The contrast between the [betweenness] tokens and the other two PATH types with regards to verbal PATH coding is striking. Whereas *traverser* is preferred to *à travers* in the case of both [throughness] and [overness], *entre* is overwhelmingly preferred to *entrer* for [betweenness]. Moreover, *à travers*, though less frequent than *traverser*, is still common in tokens of [throughness] and [overness]. The explanation for this difference may be sought in the semantics of the cognate forms. Whereas *traverser* and *à travers* take the same sort of landmark, in that both code a PATH across some sort of area, *entre* and *entrer* code quite different landmarks, with the former coding an area through which a PATH is drawn and the latter the goal or endpoint of a PATH through some sort of area, generally of minimal physical extension.

There are not quite as many instances of adverbial MANNER coding in [betweenness] and [overness] predications, 12% and 14% respectively, as in [throughness] with 17%. The difference between the three is not statistically significant (Pearson's chi.sq., with 2 df, = 1.044644, p= 0.593142). Of a total of 46 tokens in which MANNER is coded in an adverbial with one of the PATH types, just seven code it in a gerund, as in (35c) with the rest split between preposition phrases, as in (36c), and adverbs, as in (37c).

- (35) a. I bare mamelukkene sprang hun *gjennom stuene*... (HW2)  
           ‘In just pantalets-the ran she through rooms-the...’  
       b. She ran *through the rooms* wearing only pantalets... (HW2TE)  
       c. En pantalon, et en courant, elle *traversa* la pièce... (HW2TF)
- (36) a. Hun gikk lett *over den islagte gårdsplassen*. (HW2)  
           ‘She walked lightly across the icy farmyard-the.’  
       b. She walked lightly *across the snow-covered courtyard*. (HW2TE)  
       c. Elle *traversa* la cour verglacée à pas légers. (HW2TF)
- (37) a. Skrittet verdig *over golvet* og rakte henne hånden. (HW2)  
           ‘Walked dignified across floor-the and gave her hand-the.’  
       b. He strode *across the room* with dignity and extended his hand. (HW2TE)  
       c. *Traversa* dignement la pièce et lui tendit la main. (HW2TF)

We have already noted that there are 15 tokens in which *courir* occurs as the main verb, as in (30) – (32). There are just five tokens of *en courant* as an adverbial, as in (35).<sup>15</sup>

The three PATH types also differ with respect to the likelihood of their coding SITE rather than PATH in the adverbial. Translations of [overness] predications are more than twice as likely to replace PATH in the source texts with SITE than are predications of [betweenness], for example. Table 6 contains details of the two most common prepositions in SITE adverbials.

	<i>sur</i>	<i>dans</i>
<b>[betweenness]</b>	1	0
<b>[throughness]</b>	0	21
<b>[overness]</b>	19	7
<b>Total</b>	20	28

Table 6: The three most common SITE encoding prepositions in French

[betweenness] differs from the other two types not only in the frequency with which a source PATH is rendered in translation by a SITE, but in the prepositions used to encode such SITES. Prepositions used include *parmi* and *au milieu de*, as in (38c).

- (38) a. ... vi banet oss vei mellom koner med handlekurver ... (NF1)  
 ‘...we made ourselves way between women with shopping baskets...’  
 b. ...we pushed past women with baskets... (NF1TE)  
 c. ... nous frayions un chemin au milieu des femmes chargées de paniers...  
 (NF1TF)

<sup>15</sup> There are also two tokens in which *en courant* functions as the main verb in a motion predication, which itself is subordinate to another predication, as in “Ensuite, tout en courant à travers le cimetière, j’ai mentalement passé en revue tous les médecins de la ville” (BHH1TF).



[overness] is the only one of the three to encode a SITE with *sur*, as in (39), apart from a single token of [betweenness], while *dans* occurs with both [throughness] as in (40) and [overness], as in (41).

- (39) a. Vognen kjørte inn og ut av bakgater, og humpet *over åpne plasser*. (NF1)  
 ‘Carriage-the drove in and out of back streets and bumped across open squares.’  
 b. They drove in and out of back streets and jolted *across open squares*. (NF1TE)  
 c. Le carrosse serpentait à travers les ruelles et bringuebalait *sur les grand-places*. (NF1TF)
- (40) a. Først spaserte jeg på måfå *gjennom gatene*... (JG3)  
 ‘At first strolled I aimlessly through streets-the ...’  
 b. At first I wandered the streets at random... (JG3TE)  
 c. Je commençai par errer dans les rues... (JG3TF)
- (41) a. Jeg går *over himmelen* og teller stjerner for at hun skal se meg. (HW2)  
 ‘I walk across sky-the and count stars so that she will see me.’  
 b. I walk *across the sky* and count stars so she will see me. (HW2TE)  
 c. Je *passé* dans le ciel et compte les étoiles pour qu’elle me voie. (HW2TF)

To sum up this section, we have seen that there is a difference between the translations of the three PATH types with respect to verbal coding in both languages. The difference between the three types is minimal in English, as is the difference between [throughness] and [overness] in French. [Betweenness] differs from the other two in French insofar as it has fewer tokens of PATH-coding in the verb. As for adverbial coding, the three are translated similarly in English but not in French. Again it is [betweenness] that stands out as most different to the other two, which both code SITE rather than PATH to a greater extent. Construing a landmark as a SITE presupposes at least a two-dimensional space. Since in the majority of cases of [betweenness] the motion is orthogonal to two landmarks, the imaginary line extending from one pole of the landmark to the other does not normally invite a two-dimensional construal. The crossing of this sort of boundary is instantaneous, and thus an achievement rather than an activity in Vendler’s (1967) terms. We have also seen that there does not appear to be any one verb that is predominantly used to code motion [between] in French.

## 5. Correspondences between English and French

One thing is to identify the patterns of encodings of the various sorts of motion predications in English and French. Another is to compare the two languages in terms of their favoured codings. Of particular interest in this respect is the extent of overlap between the two, since knowledge of this may be useful for both lexicographical and pedagogical purposes. Table 7 contains details of coding by means of (pure) MANNER verbs and PATH adverbials in both languages.

	English	French	overlap
	MANNER V + PATH Adv.	MANNER V + PATH Adv.	
[betweenness]	31	21	19
[throughness]	61	15	11
[overness]	82	21	19
<b>Total</b>	174	57	49

Table 7: Correspondences between English and French: MANNER V + PATH Adv. in both languages

It is obvious from Table 7 that French codings of the type MANNER V + PATH Adv. are likely to overlap with English codings of the same form. 86% of the French tokens do so, as opposed to just 29% of the English tokens. Such correspondences for all three PATH types are illustrated in (42) – (44).

- (42) a. Den vinglet mellom bjørkestammene. (HW2)  
           ‘It staggered between birch-tree-trunks-the.’  
       b. It darted uncertainly among the birch trunks. (HW2TE)  
       c. Il chancelait entre les troncs des bouleaux. (HW2TF)
- (43) a. Kastet seg gjennom de små sprinkelvinduene og inn over golvet. (HW2)

- ‘Threw itself between the small latticed-windows-the and in over floor-the.’
- b. Shone *through the small leaded windows* and across the floor. (HW2TE)
- c. Se jetait *à travers les petits carreaux* des fenêtres sur le plancher. (HW2TF)
- (44) a. En jente passerte dem, hoppet *over trinnet*. (NF1)
- ‘A girl passed them, jumped over step-the.’
- b. One of the girls passed them, jumping *over the step*. (NF1TE)
- c. À ce moment, une fille passa devant eux et sauta *par-dessus la marche*. (NF1TF)

Examples (43) and (44) encode boundary-crossing predications, with the light in (43) and the girl in (44) ending up on the other side of the window and step respectively. Recall also from Table 5 that five [betweenness] predications in the Norwegian source texts are rendered by the [throughness] preposition *à travers* in the French translations. One such example is (45), which also contains *through* rather than *between* in English.

- (45) a. Det var alltid Tomas som måtte hente en stige og klatre *inn mellom de lyse kappegardinene* for å få opp døren. (HW2)
- ‘It was always Tomas who had to fetch a ladder and climb in between the bright folding curtains-the to get open door-the.’
- b. It was always Tomas who had to fetch a ladder and climb *through the pale, valanced curtains* to open the door. (HW2TE)
- c. C’était toujours Tomas qui, ensuite, devait aller chercher une échelle et se faufiler *à travers les légers rideaux à volants* pour aller ouvrir la porte. (HW2TF)

There are also many instances of correspondences between MANNER V + PATH Adv. in English and double PATH coding in French, the details of which are given in Table 8.

	English	French	overlap
	MANNER V + PATH Adv.	PATH V + PATH Adv.	
[betweenness]	31	18	8

[throughness]	61	18	12
[overness]	82	9	5
<b>Total</b>	<b>174</b>	<b>45</b>	<b>25</b>

Table 8: MANNER V + PATH Adv. in English corresponding to double PATH coding in French

(46) – (48) exemplify this correspondence for each of the PATH types (*break into* in 44b is a multi-word verb).

- (46) a. En redd vind smøg seg mellom dem. (HW2)  
‘A frightened wind sneaked itself between them.’  
b. A frightened wind slipped between them. (HW2TE)  
c. Un coup de vent léger *passa entre eux*. (HW2TF)
- (47) a. Den natten jeg *entrer* huset hans, *gjennom en takluke*, regner det. (NF1)  
‘That night-the I enter house-the his, though a skylight, is raining it.’  
b. The night I broke into his house, *through a skylight*, it was raining. (NF1TE)  
c. La nuit où j’*entre* chez lui *à travers la lucarne*, il pleut. (NF1TF)
- (48) a. Bølgene slo over hodet på ham. (HW2)  
‘Waves-the beat over head-the on him.’  
b. The waves washed over his head. (HW2TE)  
c. Les vagues lui *passaient par-dessus la tête*. (HW2TF)

The overlap between these constructions from the French point of view amounts to 67% in the case of [throughness], 56% in the case of [overness], and 44% for [betweenness]. The lower percentage for [betweenness] cannot be attributed to the paucity of [betweenness] PATH-coding verbs in French since there are actually more tokens of double PATH coding in the case of [betweenness] than the other two types. The explanation must rather be sought in English, which contains five tokens of double PATH-coding corresponding to the French ones, as in (49) and three containing a neutral motion verb and a PATH adverbial, as in (50). Of the two remaining English tokens one contains a SITE adverbial, the other, already cited as (23), no adverbial at all.

- (49) a. Hun var alt *forsvunnet mellom trærne*. (HW2)  
 She was already disappeared between trees-the.'  
 b. She *had* already *disappeared among the trees*. (HW2TE)  
 c. Elle *avait déjà disparu entre les arbres*. (HW2TF)
- (50) a. Latour ventet på at den skulle komme ut igjen *mellom leppene...* (NF1)  
 'Latour waited for that it should come out again between lips-the...'  
 b. Latour waited for it to come out again *from between his lips...* (NF1TE)  
 c. Latour s'attendait à la voir *ressortir entre les lèvres...* (NF1TF)

We saw in section 4 that translations of all three PATH types contain tokens in which a PATH in the Norwegian source texts is coded by a SITE in the translations. This practice is far more widespread in French than in English. The French tokens correspond mostly to MANNER V + PATH Adv. codings in English. The relevant figures are given in Table 9, and the overlap exemplified for all three types in (51) – (53).

	English	French	overlap
	MANNER V + PATH Adv.	MANNER V + SITE Adv.	
[betweenness]	31	7	5
[throughness]	61	11	9
[overness]	82	20	16
<b>Total</b>	<b>174</b>	<b>38</b>	<b>30</b>

Table 9: MANNER V + PATH Adv. in English corresponding to MANNER V + SITE Adv. in French

- (51) a. Piken gikk mellom trestammene... (NF1)  
 'Girl-the walked between tree-trunks-the.'  
 b. She was sauntering through the trees... (NF1TE)  
 c. Elle avait marché au milieu des futaies... (NF1TF)
- (52) a. Jeg så meg selv traske gjennom Kristianias gater... (BHH1)  
 'I saw myself trudge through Christiania's streets.'

- b. I saw myself trudging *through the streets of Kristiania...* (BHH1TE)
- c. Je me suis vu traîner dans les rues de Kristiania... (BHH1TF)
- (53) a. Han strenet *over gressbakken...* (NF1)  
       ‘He strode across grassy-knoll-the.’
- b. He stormed *across the grass...* (NF1TE)
- c. Il se mit à courir dans l'herbe... (NF1TF)

Table 9 shows that 79% of French MANNER V + SITE Adv. constructions correspond to an English MANNER V + PATH Adv. construction. In other words while the English translators in these cases have retained the whole coding pattern of the Norwegian source texts, their French counterparts have retained the verbal coding but substituted a SITE for a PATH adverbial.

On the evidence of the data in Tables 7 – 9 it would appear that it is easier to predict the English form given its French counterpart than vice versa. The fact that the degree of predictability seems to be so one-sided is no doubt due to the fact that the MANNER verb + PATH adverbial construction is so widespread in English, rendering it quite likely that this construction will overlap with various French constructions. Nevertheless, the 174 tokens coded by the construction represent just 55% of the total number of tokens in the corpus. An overlap of over 86% and 79%, such as we find in Tables 7 and 9 respectively, must therefore be considered worthy of notice.

## 6. Summary and conclusion

In this article I have presented the results of a comparative study of English and French translations of Norwegian predications of intransitive motion events containing three PATH prepositions, *mellom* [between], *over* [over/across] and *gjennom* [through], three prepositions that sometimes code PATHs that cross a barrier. Taking as my starting point all occurrences in the Oslo Multilingual Corpus of intransitive motion predications of the three Norwegian prepositions, I first described the source tokens containing these, then described the two sets of translations, and finally contrasted these two sets, paying no further attention to the forms of the original Norwegian tokens. All the English and

French translated tokens were classified according to whether they coded PATH, MANNER and/or SITE in the verb or in an adverbial, or both.

The English translations conform by and large to a satellite-framed pattern, with the codings of [betweenness] displaying the fewest variations on the MANNER verb + PATH adverbial syntagm. Predications of [overness] in English resemble the other two PATH types closely with respect to adverbial coding, but differ from them with respect to the verb, exhibiting more tokens in which the verb encodes PATH as well as tokens in which MANNER and PATH are verbally coded. Of the 23 constructions in which PATH is coded by the verb alone, fully 21 contain a form of the verb *cross*.

Turning to the French translations, there are differences between all three PATH types with respect to both verbal and adverbial coding. 60% of the verbs in the [throughness] data code PATH alone, as opposed to some 40% in the case of the other two PATH types. There are quite a few tokens in which MANNER is coded verbally for all three PATH types, perhaps more than one would expect in the case of what is commonly taken to be a predominantly verb-framed language. As for the French adverbials, there is a greater percentage of PATH-denoting phrases in [betweenness] predications than in the other two types. Of a total of 46 tokens in which MANNER is coded in an adverbial, just seven code it in a gerund, with the rest split between preposition phrases and adverbs. The three PATH types also differ with respect to the likelihood of their coding SITE rather than PATH in the adverbial. Translations of [overness] predications are more than twice as likely to replace PATH in the source texts with SITE as are predications of [betweenness].

Tables 3 and 4 contained details of the number of tokens in both sets of translations encoding MANNER, PATH and SITE. Table 10 contains details of the number of MANNER and PATH verb types as opposed to verb tokens.

	English	French
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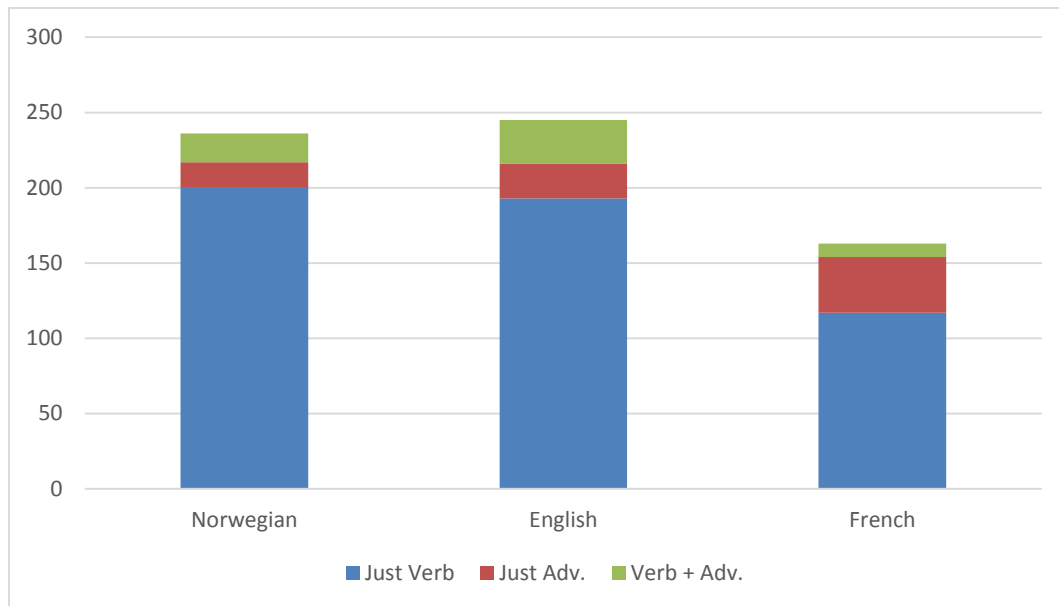
MANNER verbs	73	48
PATH verbs	15	33

*Table 10: MANNER and PATH verb types in both sets of translations*

There are 52% more MANNER verb types in this material in English than in French and 120% more PATH verb types in French than in English. These results may be compared to those of Verkerk (2015: 40-45) whose data contained 42% more MANNER verb types in English than in French (27 as opposed to 19), and 79% more PATH in French than in English (25 as opposed to 14). The difference in the results from the two studies with respect to the number of the MANNER verb types in the two languages is not statistically significant (Pearson's chi-sq., with one df. = 0.037084,  $p=0.847295$ ). Nor is the difference in the results for the PATH verb types in the two languages (Pearson's chi-sq., with one df. = 0.209135,  $p=0.647447$ ). The difference in the ratio of French MANNER verb types to PATH verb types, 48 as opposed to 33 in my study, 19 to 25 in Verkerk, is not significant either (Pearson's chi-sq., with one df. = 2.963321,  $p=0.085173$ ). However, the difference in the ratio of English MANNER verb types to PATH verb types, 73 as opposed to 15 in my study, 27 to 14 in Verkerk, is significant at the  $p=0.05$  level (Pearson's chi-sq., with one df. = 4.693486,  $p=0.030277$ ). Verkerk's study was based on 132 tokens of motion predications, the present study on 315 such tokens. The fact that the bigger sample in the present study yielded a correspondingly greater variety of MANNER verbs in English, but not in the number of PATH verbs, is not surprising. We have seen that over half of the English MANNER verb tokens occurred just once in the data. The very fact that there are so many such verbs in the English lexicon would incline one to expect that an increase in the number of tokens would lead to an increase in the number of types, up to a certain (here undefined) point. The fact that my data only threw up 15 English PATH verbs may reasonably be ascribed to the fact that the study set out to examine just three PATH types.

Figure 4 is based on the results presented in Tables 2, 3 and 4 and shows the conflated raw tokens for MANNER codings with all three PATH types.





*Figure 4: conflated raw totals for all three PATH types for English and French codings of MANNER*

Figure 4 shows that English contains slightly more encodings of MANNER than the source texts, whereas French contains fewer. This is in line with what one would have expected from the literature (Slobin 2005, Verkerk 2015). While Figure 4 contains raw figures, Figure 5 presents in the form of percentages some of the data in Tables 3 and 4 and Figures 1 and 2. In Figure 5 the data for SITE have been omitted and tokens of MANNER + PATH are listed twice, under both MANNER and PATH. The figure is designed to answer the following question:

- If MANNER and PATH are coded, where are they coded, in the verb or an adverbial?

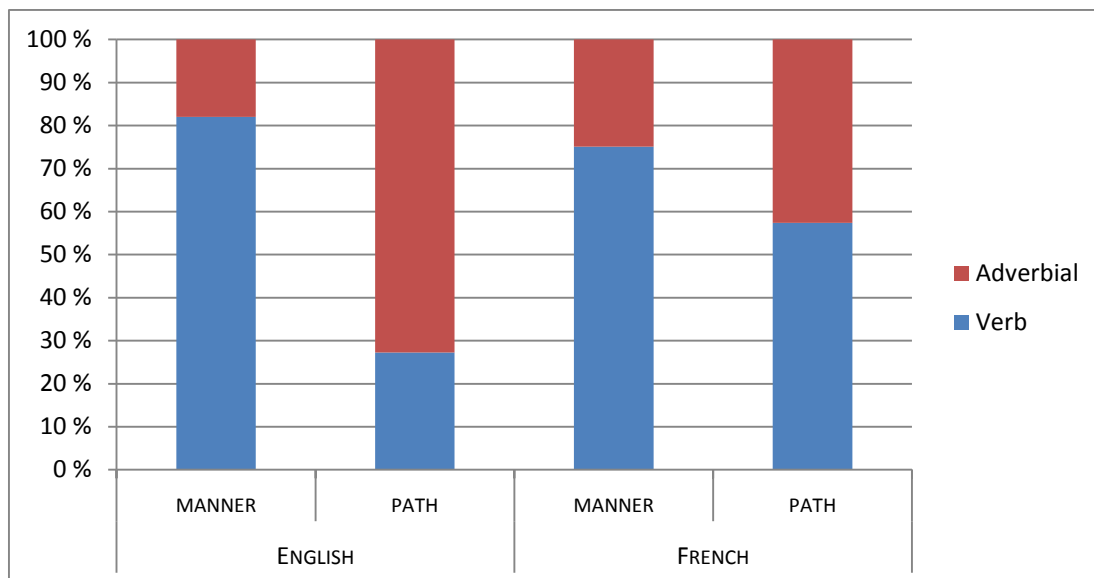


Figure 5: Percentages of English and French codings of motion [betweenness], [throughness] and [loveness], with tokens of MANNER + PATH assigned to both MANNER and PATH categories

Figure 5 does not tell us anything about how often the two properties are coded in the two sets of translations in the corpus. These data may be gleaned from Tables 3 and 4, which show that the English translations are 40% more likely to contain a coding of MANNER and 20% more likely to contain a coding of PATH. If one were to add the numbers for SITE to those of PATH in both languages and ask how often the translator made an effort to convey spatial information about the motion predication, the figures for the two languages would be practically identical (there are 3% more such tokens in English). If, however, we consider Figure 5 in the light of the question it is designed to answer, we will see that as far as English is concerned MANNER tends to be coded in the verb and PATH tends to be coded in an adverbial. In other words the English in these texts conforms by and large to a satellite-framed pattern. French resembles English when it comes to coding MANNER in the verb. It differs from it in also preferring, if only marginally, to code PATH in the verb. Unlike in the case of English, the French in these texts does not appear to conform clearly to either of Talmy's stereotypes. This finding is also in line with other recent research (Pourcel & Kopecka 2005, Kopecka 2006, Hickman et al. 2006).

In section 5 I looked at correspondences between the coding in the two sets of translations. French codings of the types MANNER V + PATH Adv., MANNER V + SITE Adv. and PATH V + PATH Adv. are all likely to overlap with English codings of the MANNER V + PATH Adv. construction, in around 80% of cases for the first two constructions types. [overness] is the only one of the three types to code motion actions and activities by means of MANNER + PATH verbs in both languages. The fact that the overlap is generally more predictable from the French side might be taken to indicate that the English L1 learner of French is at something of a disadvantage when it comes to acquiring (at least some of) these sorts of motion predications compared to the French L1 learner of English.

The *tertium comparationis* for this study consists of tokens in Norwegian all of which code PATH in an adverbial. In addition a majority of the tokens that contain a coding of MANNER code it in the verb. As was pointed out at the outset, this may have consequences for the constructions chosen by the two sets of translators. However, even allowing for the fact that the figures for verbal MANNER coding and adverbial PATH coding in either or both of the two target languages may be somewhat inflated in the translations compared to original texts in these languages, there is no gainsaying the fact that the data in Figure 5 give pause for thought when it comes to the typological classification of French, at least when it comes to the types of motion predications discussed in this paper. We have also seen various examples of clear boundary-crossing events that are rendered by MANNER verbs in French. It is important, I think, to point out that the three PATH types investigated here all have in common a focus on the central portion of the PATH, the ROUTE. It may well be the case that the languages pattern differently when it comes to predications of GOAL or SOURCE. That question, however, must await another paper.

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